Amendments to the Specification

Please replace paragraph 27 in the application as published with the following:

     In the dynamic load balancing model, the work units 200a, 200b often are completed out of order. Accordingly, in step 316, the parallel core 106 collects the processed work units 200a', 200b' and, if needed, sequences the processed work units 200a', 200b' in the proper order before returning them to the source 105a in step 318. In another embodiment, as each compute node 110a, ~~110bprocesses~~ 110b, processes the work unit 200a, 200b, the processed data is cached for return to the parallel core 106. The parallel core 106 instructs each compute node 110a, 110b when to start sending the cached data so that it receives the processed work units 200a', 200b' in proper order. In this embodiment, a processed work unit, e.g., 200a' may be cached, while the compute node 110a begins processing a next work unit (not shown). In addition to the processed data 200a', 200b', the parallel core 106 also returns error, status, log and trace information to the source 105a.